MS offers tools to secure polls

Deccan Chronicle · 8 May 2019

Washington, May 7: Microsoft has announced an ambitious effort to make voting secure, verifiable and subject to reliable audits by registering ballots in encrypted form so they can be accurately and independently tracked long after they are cast.

Two of the three top US elections vendors have expressed interest in potentially incorporating the open-source software into their voting systems.

The software is being developed with Galois, an Oregon-based company, creating a secure voting system prototype under contract with DARPA. Dubbed “ElectionGuard,” it will be available this summer, Microsoft says, with early prototypes ready to pilot for next year’s US general elections.

CEO Satya Nadella announced the initiative Monday at a developer’s conference in Seattle, saying the software development kit would help “modernise all of the election infrastructure everywhere in the world.”

Three little-known US companies control about 90 per cent of the market for election equipment, but have long faced criticism for poor security, antiquated technology and insufficient transparency around their proprietary, black-box voting systems.

Open-source software is inherently more secure because the underlying code is easily scrutinised by outside experts but has been shunned by the dominant vendors whose customers — the nation’s 10,000 election jurisdictions — are mostly strapped for cash.

None offered bids when Travis County, Texas, home to Austin, sought to build a system with the “end-to-end” verification attributes that ElectionGuard promises to deliver.

Two of the leading vendors, Election Systems & Software of Omaha, Nebraska, and Hart InterCivic of Austin, Texas, both expressed interest in partnering with Microsoft for ElectionGuard. A spokeswoman for a third vendor, Dominion Voting Systems of Denver, said the company looks forward to “learning more” about the initiative.

Anyone with an existing voting system or developing a new one will be able to incorporate ElectionGuard — at the state or local level in the US or national level for jurisdictions abroad.

“Once the barrier to entry is low enough, hopefully one of the vendors will go for it, and that will bring the rest of them in quickly enough,” said Dan Wallach, a Rice University computer scientist who assisted Travis County.

“It can be used with a ballot-marking device. It can be used with an optical scanner, on hand-marked paper ballots,” said Josh Benaloh, a senior cryptographer at Microsoft Research.